



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087856, 944	05/15/97	HOFFMANN	8100-77501

MM41/0928

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ART UNIT	PAPER NUMBER
2854	#28

09/28/98

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/636,944

Applicant(s)

Eduard Hoffmann et al

Examiner

J R Fisher

Group Art Unit

2854



☒ Responsive to communication(s) filed on July 16, 1998 and September 8, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 24

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

○ **Claims 1 and 2 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of Fantoni (4,964,338), Johnson (1,690,684), Tittgemeyer (4,913,048) and in view of an acknowledgment of prior art under 35 USC 102(f) or (g). Applicants have acknowledged that the prior art (prior to his disclosed subject matter) teaches that printing sleeves for printing and transfer forms "...can be slipped by means of pressurized air over a printing cylinder core in the known manner and affixed thereto by shutting off the air supply..." (Specification, page 1, Description of the Prior Art). This disclosure is available as prior art under 35 USC 102(f) or (g) or on the admission per se. In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982).

Kobler et al (5,488,903) discloses a metal carrying sleeve for printing and transfer forms, comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam permanently connects together the facing edges of the sheet, and a homogeneous, continuous and outer circumferential surface is formed by processing

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the surface so that continuous printing is possible. Claim 1 recites a homogeneous, continuous and uniform outer circumferential metal surface including the weld seam and formed by processing the surface and the weld seam so that continuous printing is possible. It is noted that Kobler et al disclose a metal weld seam (Johnson and Fantoni also disclose a metal seam). Applicants have contended that there is no disclosure in Kobler et al (5,488,903) of a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. In this regard, Fantoni (4,964,338) discloses a metal carrying sleeve for printing comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A butt seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) clearly teaches that the formed butt seam for the printing plate produces a homogeneous, continuous and uniform surface, i.e., "...a **continuous surface** of the printing plate along the butt joint..." (col.2); The seam "...ensures **continuity on the external surface** of the printing plate between those portions of the outer side of the deformed sheet 4 which flank the inlet..." (col. 3); the seam produces a "...**smooth and continuous or external surface of the plate**..." (col. 3), and establishes "...a **smooth transition** between those portions of said external surface which are adjacent said inlet..." (cl. 9). Johnson (1,690,684)

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discloses a metal carrying sleeve for dyeing (printing) comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A metal weld seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Johnson (1,690,684) teaches that "...The outer surface of the welding material, as at 13a, which protrudes beyond the surface of the sheet metal cylinder 12, is then preferably finished off in a known manner to the outer surface of the sheet metal, and if desired, the entire outer surface may be turned or machined to a true cylinder..." (page, col. 1). Accordingly, Johnson teaches the processing of the surface so as to achieve a homogeneous, continuous and uniform outer surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process the surface and the weld seam in Kobler et al (5,488,903) so as to achieve a homogeneous, continuous and uniform outer circumferential surface in a manner and for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). The motivation would have involved the desire to achieve a continuous and uniform outer circumferential surface for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684).

With respect to applicant's remarks, Johnson (1,690,684) teaches that the outer surface of the welding material, which protrudes beyond the surface of the sheet metal

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cylinder 12, is finished off in a known manner to the outer surface of the sheet metal, and that the entire outer surface may be turned or machined to a true cylinder.

Claim 1 has been amended to recite that "...the sheet is expandable and slidable onto a printing cylinder via pressurized air..." It is noted that this recitation is set forth in purely functional terms. These article claims do not positively recite any system components for performing that function. Accordingly, such functional recitation does not patentably define over the references as applied. However, Tittgemeyer (4,913,048) has been applied to teach that it is conventional to mount a carrying sleeve onto printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. Further, applicants have acknowledged (35 USC 102(f) or (g) or on the admission per se) in their specification that the prior art teaches that it is conventional to mount a carrying sleeve on a printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to broadly utilize any conventional cylinder mounting arrangement for the sleeve in Kobler et al if such were desired in place of the mounting system used therein. For example, it would have been obvious to slide the sleeve onto the cylinder via pressurized air in a manner as taught by Tittgemeyer (4,913,048) and as taught by the admission of prior art as noted above. Note that Kobler et al teach that the web 10 need not be connected with the weld seam. The suggestion and motivation for such a modification is found in the

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self-evident advantages thereof, such as the substitution of known alternatives of equivalent mounting arrangements so as to obtain the expected and desired results therefrom.

- **Claim 3 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of the secondary references, as applied to claim 1 above, further in view of Fromson et al (4,183,788) and Gerhardt (5,281,511). The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, each of Fromson et al (4,183,788), Gerhardt (5,281,511) and Fantoni et al (4,964,338) discloses the conventional fabrication of a printing surface by the application of a photosensitive coat. Fromson et al (4,183,788) further teaches the conventional fabrication of a roughened and anodized surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903) depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Fromson et al (4,183,788), Gerhardt (5,281,511) and Fantoni et al (4,964,338). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

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- **Claim 4 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of the secondary references, as applied to claim 1 above, further in view of Tittgemeyer (4,913,048). The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, Tittgemeyer (4,913,048) discloses the placement of a conventional water conducting coat on the outer surface of a printing roller so as to achieve a fluid releasing function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903) depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Tittgemeyer (4,913,048). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

- **Claim 5 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of the secondary references, as applied to claim 1 above, further in view of Kuhn et al (5,468,568) and Morgan (5,093,180). The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, each of Kuhn et al (5,468,568), Tittgemeyer (4,913,048) and Morgan (5,093,180) discloses the placement of a conventional engraved copper coat on the outer surface of a printing

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roller so as to achieve a printing function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903), depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Kuhn et al (5,468,568), Tittgemeyer (4,913,048) and Morgan (5,093,180). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

- **Claim 6 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of the secondary references, as applied to claim 1 above, further in view of each of Kuhn et al (5,468,568) and Gerhardt (5,281,511). The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, each of Kuhn et al (5,468,568), Tittgemeyer (4,913,048) and Gerhardt (5,281,511) discloses the placement of a conventional rubber coat on the outer surface of a printing roller so as to achieve a fluid transfer function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903), depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Kuhn et al (5,468,568), Tittgemeyer

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(4,913,048) and Gerhardt (5,281,511). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

- **Claim 7 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of the secondary references, as applied to claim 1, further in view of each of Kuhn et al (5,468,568), Lewis (5,289,769) and Berna et al (5,347,927). The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, each of Kuhn et al (5,468,568), Lewis (5,289,769) and Berna et al (5,347,927) discloses the placement of a conventional flexographic printing form on the outer surface of a printing roller so as to achieve a fluid transfer function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903), depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Kuhn et al (5,468,568), Lewis (5,289,769), and Berna et al (5,347,927). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

- **Claim 8 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view Johnson (1,690,684), Fantoni (4,964,338),

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Tittgemeyer (4,913,048) and in view of an acknowledgment of prior art under 35 USC 102(f) or (g). Applicants have acknowledged that the prior art (prior to his disclosed subject matter) teaches that printing sleeves for printing and transfer forms "...can be slipped by means of pressurized air over a printing cylinder core in the known manner and affixed thereto by shutting off the air supply..." (Specification, page 1, Description of the Prior Art). This disclosure is available as prior art under 35 USC 102(f) or (g) or on the admission per se. In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982).

Kobler et al (5,488,903) discloses a metal carrying sleeve for printing and transfer forms, comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam permanently connects together the facing edges of the sheet, and a homogeneous, continuous and outer circumferential surface is formed by processing the surface so that continuous printing is possible. Claim 8 has been amended to recite a "uniform" continuous outer surface. Applicants have contended that, as amended, the references do not disclose a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. In response to applicants' remarks, Fantoni (4,964,338) is applied for the disclosure of a metal carrying sleeve for printing comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat

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sheet face one another. A butt seam connects together the facing edges of the sheet to form a homogeneous, uniform continuous outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) clearly teaches that the formed butt seam for the printing plate produces a homogeneous, uniform continuous surface, i.e., "...a **continuous surface** of the printing plate along the butt joint..." (col.2); The seam "...ensures **continuity on the external surface** of the printing plate between those portions of the outer side of the deformed sheet 4 which flank the inlet..." (col. 3); the seam produces a "...**smooth and continuous or external surface of the plate...**" (col. 3), and establishes "...a **smooth transition** between those portions of said external surface which are adjacent said inlet..." (cl. 9). Johnson (1,690,684) discloses a metal carrying sleeve for dyeing (printing) comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam connects together the facing edges of the sheet to form a homogeneous, uniform continuous outer surface formed by processing the surface and the weld seam, i.e., Johnson (1,690,684) teaches that "...The outer surface of the welding material, as at 13a, which protrudes beyond the surface of the sheet metal cylinder 12, is then preferably finished off in a known manner to the outer surface of the sheet metal, and if desired, the entire outer surface may be turned or machined to a true cylinder..." (page, col. 1). As broadly recited, the configuration of the welded seam before

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processing, as claimed, would have been obvious to one of ordinary skill in the art. This is especially so in view of the teaching of the same in Johnson (1,690,684) who discloses a conventional welded seam having an outwardly directed crown before processing the surface. The motivation would have involved merely the obvious utilization of conventional welding techniques. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process the surface and the weld seam in Kobler et al (5,488,903) so as to achieve a homogeneous, continuous and uniform outer circumferential surface in a manner and for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). The motivation would have involved the desire to achieve a uniform continuous outer circumferential surface for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). With respect to Applicants' remarks, Johnson (1,690,684) teaches that the outer surface of the welding material, which protrudes beyond the surface of the sheet metal cylinder 12, is finished off in a known manner to the outer surface of the sheet metal, and that the entire outer surface may be turned or machined to a true cylinder.

Claim 8 has been amended to recite that "...the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder..." It is noted that this recitation is set forth in purely functional terms. There is no positive method step that limits the claimed steps to that function. Accordingly, such

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functional recitation does not patentably define over the references as applied. However, Tittgemeyer (4,913,048) has been applied to teach that it is conventional to mount a carrying sleeve onto printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. Further, applicants have acknowledged (35 USC 102(f) or (g) or on the admission per se) in their specification that the prior art teaches that it is conventional to mount a carrying sleeve on a printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to broadly utilize any conventional cylinder mounting arrangement for the sleeve in Kobler et al if such were desired in place of the mounting system used therein. For example, it would have been obvious to slide the sleeve onto the cylinder via pressurized air in a manner as taught by Tittgemeyer (4,913,048) and as taught by the admission of prior art as noted above. Note that Kobler et al teach that the web 10 need not be connected with the weld seam. The suggestion and motivation for such a modification is found in the self-evident advantages thereof, such as the substitution of known alternatives of equivalent mounting arrangements so as to obtain the expected and desired results therefrom.

- **Claims 9, 10 and 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Kobler et al (5,488,903) in view of the secondary references, as applied to claim 8 above, further in view of Dekumbis et al (5,147,999). Dekumbis**

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et al (5,147,999) discloses conventional welding techniques comprising the use of welding filler materials, targeted gas feeds, and deposit welding. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the weld in Kobler et al (5,488,903) by using conventional welding techniques, as claimed, especially in view of the teaching of the same as disclosed by Dekumbis et al (5,147,999).

- **Claims 12 and 13 are rejected under 35 U.S.C. § 103** as being unpatentable over Kobler et al (5,488,903) in view of Fantoni (4,964,338), Johnson (1,690,684), Fromson et al (4,183,788), Gerhardt (5,281,511), Tittgemeyer (4,913,048), and in view of an acknowledgment of prior art under 35 USC 102(f) or (g). Applicants have acknowledged that the prior art (prior to his disclosed subject matter) teaches that printing sleeves for printing and transfer forms "...can be slipped by means of pressurized air over a printing cylinder core in the known manner and affixed thereto by shutting off the air supply..." (Specification, page 1, Description of the Prior Art). This disclosure is available as prior art under 35 USC 102(f) or (g) or on the admission per se. In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982).

Kobler et al (5,488,903) discloses a metal carrying sleeve for printing and transfer forms, comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam permanently connects together the facing edges of the sheet, and a

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homogeneous, continuous and outer circumferential surface is formed by processing the surface so that continuous printing is possible. Claim 12 recites a continuous "uniform" outer surface. Applicants have contended that the references do not disclose a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. In response to applicants' amendment and remarks, Fantoni (4,964,338) is applied for the disclosure of a homogeneous, continuous and uniform outer circumferential surface formed by processing a sleeve surface and with a weld seam. In this regard, Fantoni (4,964,338) discloses a metal carrying sleeve for printing comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A butt seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) clearly teaches that the formed butt seam for the printing plate results in a homogeneous, continuous uniform outer surface, i.e., "...a **continuous surface** of the printing plate along the butt joint..." (col.2); the seam "...ensures **continuity on the external surface** of the printing plate between those portions of the outer side of the deformed sheet 4 which flank the inlet..." (col. 3); the seam produces a "...**smooth and continuous or external surface of the plate...**" (col. 3), and it establishes "...a **smooth transition** between those portions of said external surface which are adjacent said inlet..." (cl.

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9). Johnson (1,690,684) discloses a metal carrying sleeve for dyeing (printing) comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam connects together the facing edges of the sheet to form a homogeneous, continuous uniform outer circumferential surface formed by processing the surface and the weld seam. Johnson (1,690,684) teaches that "...The outer surface of the welding material, as at 13a, which protrudes beyond the surface of the sheet metal cylinder 12, is then preferably finished off in a known manner to the outer surface of the sheet metal, and if desired, the entire outer surface may be turned or machined to a true cylinder..." (page, col. 1). Accordingly, this would produce a homogeneous, continuous uniform outer surface. As broadly recited, the configuration of the welded seam before processing the cylinder surface, as claimed, would have been obvious to one of ordinary skill in the art. This is especially so in view of the teaching of the same in Johnson (1,690,684) who discloses a conventional welded seam having an outwardly directed crown before processing the outer sleeve surface. The motivation would have involved merely the obvious utilization of conventional welding techniques. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process the surface and the weld seam in Kobler et al (5,488,903) so as to achieve a homogeneous, continuous uniform outer surface in a manner and for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). The

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motivation would have involved the desire to achieve a continuous and uniform outer circumferential surface for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684) as exemplified above. Applicants' remarks and claim amendments have been carefully considered and are answered by the application of the references as noted above. Johnson (1,690,684) does teach that the outer surface of the welding material, which protrudes beyond the surface of the sheet metal cylinder 12, is finished off in a known manner to the outer surface of the sheet metal, and that the entire outer surface may be turned or machined to a true cylinder. The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, each of Fromson et al (4,183,788), Gerhardt (5,281,511) and Fantoni et al (4,964,338) discloses the conventional fabrication of a printing surface by the application of a photosensitive coat. Fromson et al (4,183,788) further teaches the conventional fabrication of a roughened and anodized surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903) depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Fromson et al (4,183,788), Gerhardt (5,281,511) and Fantoni et al (4,964,338). The motivation would have involved

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merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

Claim 12 has been amended to recite that "...the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder..." It is noted that this recitation is set forth in purely functional terms. The claim does not recite any positive method step that limits the claimed steps to that function. Accordingly, such functional recitation does not patentably define over the references as applied. However, Tittgemeyer (4,913,048) has been applied to teach that it is conventional to mount a carrying sleeve onto printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. Further, applicants have acknowledged (35 USC 102(f) or (g) or on the admission per se) in their specification that the prior art teaches that it is conventional to mount a carrying sleeve on a printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to broadly utilize any conventional cylinder mounting arrangement for the sleeve in Kobler et al if such were desired in place of the mounting system used therein. For example, it would have been obvious to slide the sleeve onto the cylinder via pressurized air in a manner as taught by Tittgemeyer (4,913,048) and as taught by the admission of prior art as noted above. Note that Kobler et al teach that the web 10 need not be connected with the weld seam. The suggestion and motivation for such

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a modification is found in the self-evident advantages thereof, such as the substitution of known alternatives of equivalent mounting arrangements so as to obtain the expected and desired results therefrom.

- **Claims 14 and 15 are rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of Fantoni (4,964,338), Kuhn et al (5,468,568), Morgan (5,093,180), Johnson (1,690,684), Tittgemeyer (4,913,048), and in view of an acknowledgment of prior art under 35 USC 102(f) or (g). Applicants have acknowledged that the prior art (prior to his disclosed subject matter) teaches that printing sleeves for printing and transfer forms "...can be slipped by means of pressurized air over a printing cylinder core in the known manner and affixed thereto by shutting off the air supply..." (Specification, page 1, Description of the Prior Art). This disclosure is available as prior art under 35 USC 102(f) or (g) or on the admission per se. In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982).

Kobler et al (5,488,903) discloses a metal carrying sleeve for printing and transfer forms, comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam permanently connects together the facing edges of the sheet, and a homogeneous, continuous outer circumferential surface is formed by processing the surface so that continuous printing is possible. Claim 14 has been amended to recite a continuous "uniform" outer surface. Applicants have contended that, as amended,

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the references do not disclose a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) is applied for the disclosure of a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. In this regard, Fantoni (4,964,338) discloses a metal carrying sleeve for printing comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A butt seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) clearly teaches that the formed butt seam for the printing plate produces a continuous uniform outer surface, i.e., "...a **continuous surface** of the printing plate along the butt joint..." (col.2); the seam "...ensures **continuity on the external surface** of the printing plate between those portions of the outer side of the deformed sheet 4 which flank the inlet..." (col. 3); the seam produces a "...**smooth and continuous or external surface of the plate**..." (col. 3), and establishes "...a **smooth transition** between those portions of said external surface which are adjacent said inlet..." (cl. 9). Johnson (1,690,684) discloses a metal carrying sleeve for dyeing (printing) comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam connects together the facing edges of the sheet

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to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Johnson (1,690,684) teaches that "...The outer surface of the welding material, as at 13a, which protrudes beyond the surface of the sheet metal cylinder 12, is then preferably finished off in a known manner to the outer surface of the sheet metal, and if desired, the entire outer surface may be turned or machined to a true cylinder..." (page, col. 1). Accordingly, Johnson (1,690,684) teaches the processing of the sleeve surface so as to obtain a continuous uniform outer surface. As broadly recited, the configuration of the welded seam before processing the surface, as claimed, would have been obvious to one of ordinary skill in the art. This is especially so in view of the teaching of the same in Johnson (1,690,684) who discloses a conventional welded seam having an outwardly directed crown before processing the surface. The motivation would have involved merely the obvious utilization of conventional welding techniques. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process the surface and the weld seam in Kobler et al (5,488,903) so as to achieve a homogeneous, continuous uniform outer circumferential surface in a manner and for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). The motivation would have involved the desire to achieve a continuous and uniform outer circumferential surface for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). Applicants' remarks and claim amendments have been carefully

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considered and are answered by the application of the references as noted above. Johnson (1,690,684) does teach that the outer surface of the welding material, which protrudes beyond the surface of the sheet metal cylinder 12, is finished off in a known manner to the outer surface of the sheet metal, and that the entire outer surface may be turned or machined to a true cylinder. The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, Kuhn et al (5,468,568) and Morgan (5,093,180) disclose the placement of a conventional engraved copper coat on the outer surface of a printing roller so as to achieve a gravure printing function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903), depending on the fluid transfer function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Kuhn et al (5,468,568) and Morgan (5,093,180). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

Claim 14 has been amended to recite that "...the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder..." It is noted that this recitation is set forth in purely functional terms. The claim does not recite any positive method step that limits the claimed steps to that function.

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Accordingly, such functional recitation does not patentably define over the references as applied. However, Tittgemeyer (4,913,048) has been applied to teach that it is conventional to mount a carrying sleeve onto printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. Further, applicants have acknowledged (35 USC 102(f) or (g) or on the admission per se) in their specification that the prior art teaches that it is conventional to mount a carrying sleeve on a printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to broadly utilize any conventional cylinder mounting arrangement for the sleeve in Kobler et al if such were desired in place of the mounting system used therein. For example, it would have been obvious to slide the sleeve onto the cylinder via pressurized air in a manner as taught by Tittgemeyer (4,913,048) and as taught by the admission of prior art as noted above. Note that Kobler et al teach that the web 10 need not be connected with the weld seam. The suggestion and motivation for such a modification is found in the self-evident advantages thereof, such as the substitution of known alternatives of equivalent mounting arrangements so as to obtain the expected and desired results therefrom.

- **Claim 16 is rejected under 35 U.S.C. § 103** as being unpatentable over Kobler et al (5,488,903) in view of Johnson (1,690,684), Fantoni (4,964,338) and each of Kuhn et al (5,468,568), Tittgemeyer (4,913,048), Gerhardt (5,281,511), and

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in view of an acknowledgment of prior art under 35 USC 102(f) or (g). Applicants have acknowledged that the prior art (prior to his disclosed subject matter) teaches that printing sleeves for printing and transfer forms "...can be slipped by means of pressurized air over a printing cylinder core in the known manner and affixed thereto by shutting off the air supply..." (Specification, page 1, Description of the Prior Art). This disclosure is available as prior art under 35 USC 102(f) or (g) or on the admission per se. In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982).

Kobler et al (5,488,903) disclose a metal carrying sleeve for printing and transfer forms, comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam permanently connects together the facing edges of the sheet, and a homogeneous, continuous and outer circumferential surface is formed by processing the surface so that continuous printing is possible. Claim 16 has been amended to recite a continuous "uniform" outer surface. Applicants have contended that the references do not disclose a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) is applied for the disclosure of a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. In this regard, Fantoni (4,964,338) discloses a metal carrying sleeve for printing comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow

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cylindrical form so that two edges of the flat sheet face one another. A butt seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) clearly teaches that the formed butt seam for the printing plate produces a uniform continuous outer surface, i.e., "...a **continuous surface** of the printing plate along the butt joint..." (col.2); the seam "...ensures **continuity on the external surface** of the printing plate between those portions of the outer side of the deformed sheet 4 which flank the inlet..." (col. 3); the seam produces a "...**smooth and continuous or external surface of the plate**..." (col. 3), and establishes "...a **smooth transition** between those portions of said external surface which are adjacent said inlet..." (cl. 9). Johnson (1,690,684) further discloses a metal carrying sleeve for dyeing (printing) comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Johnson (1,690,684) teaches that "...The outer surface of the welding material, as at 13a, which protrudes beyond the surface of the sheet metal cylinder 12, is then preferably finished off in a known manner to the outer surface of the sheet metal, and if desired, the entire outer surface may be turned or machined to a true cylinder..." (page, col. 1). Accordingly, Johnson

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(1,690,684) also teaches a step of processing the surface so as to obtain a continuous uniform outer surface. As broadly recited, the configuration of the welded seam before processing the surface, as claimed, would have been obvious to one of ordinary skill in the art. This is especially so in view of the teaching of the same in Johnson (1,690,684) who teaches that the welded seam has an outwardly directed crown prior to processing the surface. The motivation would have involved merely the obvious utilization of conventional welding techniques. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process the surface and the weld seam in Kobler et al (5,488,903) so as to achieve a homogeneous, continuous uniform outer circumferential surface in a manner and for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). The motivation would have involved the desire to achieve a continuous and uniform outer circumferential surface for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684) as exemplified above. Applicants' remarks and claim amendments have been carefully considered and are answered by the application of the references as noted above. Johnson (1,690,684) does teach that the outer surface of the welding material, which protrudes beyond the surface of the sheet metal cylinder 12, is finished off in a known manner to the outer surface of the sheet metal, and that the entire outer surface may be turned or machined to a true cylinder. The particular working surface placed on the carrying sleeve would necessarily depend on

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the expected function desired to be obtained. For example, each of Kuhn et al (5,468,568), Tittgemeyer (4,913,048) and Gerhardt (5,281,511) discloses the placement of a conventional rubber coat on the outer surface of a printing roller so as to achieve a fluid transfer function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903), depending on the function desired. For example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by each of Kuhn et al (5,468,568), Tittgemeyer (4,913,048) and Gerhardt (5,281,511). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

Claim 16 has been amended has been amended to recite that "...the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder..." It is noted that this recitation is set forth in purely functional terms. The claim does not recite any positive method step that limits the claimed steps to that function. Accordingly, such functional recitation does not patentably define over the references as applied. However, Tittgemeyer (4,913,048) has been applied to teach that it is conventional to mount a carrying sleeve onto printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. Further, applicants have acknowledged (35 USC 102(f) or (g) or on the admission per se) in their

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specification that the prior art teaches that it is conventional to mount a carrying sleeve on a printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to broadly utilize any conventional cylinder mounting arrangement for the sleeve in Kobler et al if such were desired in place of the mounting system used therein. For example, it would have been obvious to slide the sleeve onto the cylinder via pressurized air in a manner as taught by Tittgemeyer (4,913,048) and as taught by the admission of prior art as noted above. Note that Kobler et al teach that the web 10 need not be connected with the weld seam. The suggestion and motivation for such a modification is found in the self-evident advantages thereof, such as the substitution of known alternatives of equivalent mounting arrangements so as to obtain the expected and desired results therefrom.

- **Claim 17 is rejected under 35 U.S.C. § 103(a)** as being unpatentable over Kobler et al (5,488,903) in view of Johnson (1,690,684), Fantoni (4,964,338), Fadner et al (5,207,158), Morgan (5,093,180), Jenkins (4,963,404), Tittgemeyer (4,913,048) and in view of an acknowledgment of prior art under 35 USC 102(f) or (g). Applicants have acknowledged that the prior art (prior to his disclosed subject matter) teaches that printing sleeves for printing and transfer forms "...can be slipped by means of pressurized air over a printing cylinder core in the known manner and affixed thereto by shutting off the air supply..." (Specification, page 1, Description

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of the Prior Art). This disclosure is available as prior art under 35 USC 102(f) or (g) or on the admission per se. In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982).

Kobler et al (5,488,903) disclose a metal carrying sleeve for printing and transfer forms, comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam permanently connects together the facing edges of the sheet, and a homogeneous, continuous and outer circumferential surface is formed by processing the surface so that continuous printing is possible. Claim 17 has been amended to recite a continuous "uniform" outer surface. Applicants contend that, as amended, the references do not disclose a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) is applied for the disclosure of a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. In this regard, Fantoni (4,964,338) discloses a metal carrying sleeve for printing comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A butt seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Fantoni (4,964,338) clearly teaches that the formed butt seam for the printing plate produces a continuous uniform surface, i.e., "...a **continuous surface**

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of the printing plate along the butt joint..." (col.2); the seam "...ensures **continuity on the external surface** of the printing plate between those portions of the outer side of the deformed sheet 4 which flank the inlet..." (col. 3); the seam produces a "...**smooth and continuous or external surface of the plate**..." (col. 3), and establishes "...a **smooth transition** between those portions of said external surface which are adjacent said inlet..." (cl. 9). Johnson (1,690,684) further discloses a metal carrying sleeve for dyeing (printing) comprising a rectangular, thin-walled flat metal sheet that is bent to a desired hollow cylindrical form so that two edges of the flat sheet face one another. A weld seam connects together the facing edges of the sheet to form a homogeneous, continuous and uniform outer circumferential surface formed by processing the surface and the weld seam. Johnson (1,690,684) teaches that "...The outer surface of the welding material, as at 13a, which protrudes beyond the surface of the sheet metal cylinder 12, is then preferably finished off in a known manner to the outer surface of the sheet metal, and if desired, the entire outer surface may be turned or machined to a true cylinder..." (page, col. 1). Thus Johnson (1,690,684) also teaches processing the surface so as to obtain a continuous uniform outer surface. As broadly recited, the configuration of the welded seam, as claimed, would have been obvious to one of ordinary skill in the art. This is especially so in view of the teaching of the same in Johnson (1,690,684) who discloses a conventional welded seam having an outwardly directed crown. The motivation would have involved

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merely the obvious utilization of conventional welding techniques. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process the sleeve surface and the weld seam in Kobler et al (5,488,903) so as to achieve a homogeneous, continuous uniform outer circumferential surface in a manner and for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). The motivation would have involved the desire to achieve a continuous and uniform outer circumferential surface for the reasons as taught by each of Fantoni (4,964,338) and Johnson (1,690,684). Applicants' remarks and claim amendments have been carefully considered and are answered by the application of the references as noted above. Johnson (1,690,684) does teach that the outer surface of the welding material, which protrudes beyond the surface of the sheet metal cylinder 12, is finished off in a known manner to the outer surface of the sheet metal, and that the entire outer surface may be turned or machined to a true cylinder. The particular working surface placed on the carrying sleeve would necessarily depend on the expected function desired to be obtained. For example, each of Fadner et al (5,207,158), Morgan (5,093,180) and Jenkins (4,963,404) discloses the placement of a conventional ceramic coat on the outer surface of a printing roller so as to achieve a fluid transfer function. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize any conventional working surface on the roller of Kobler et al (5,488,903), depending on the function desired. For


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example, it would have been obvious to utilize a roller surface in Kobler et al (5,488,903) for the reasons and as taught by Fadner et al (5,207,158) Morgan (5,093,180) and Jenkins (4,963,404). The motivation would have involved merely the obvious selection of conventional roller surfaces so as to obtain the expected and desired results therefrom.

Claim 17 has been amended to recite that "...the cylindrical base plate is expandable by pressurized air so that it can be slid onto the printing cylinder-..." It is noted that this recitation is set forth in purely functional terms. The claim does not recite any positive method step that limits the claimed steps to that function. Accordingly, such functional recitation does not patentably define over the references as applied. However, Tittgemeyer (4,913,048) has been applied to teach that it is conventional to mount a carrying sleeve onto printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. Further, applicants have acknowledged (35 USC 102(f) or (g) or on the admission per se) in their specification that the prior art teaches that it is conventional to mount a carrying sleeve on a printing cylinder by sliding the sleeve onto the printing cylinder via pressurized air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to broadly utilize any conventional cylinder mounting arrangement for the sleeve in Kobler et al if such were desired in place of the mounting system used therein. For example, it would have been obvious to slide the sleeve onto the cylinder via

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pressurized air in a manner as taught by Tittgemeyer (4,913,048) and as taught by the admission of prior art as noted above. Note that Kobler et al teach that the web 10 need not be connected with the weld seam. The suggestion and motivation for such a modification is found in the self-evident advantages thereof, such as the substitution of known alternatives of equivalent mounting arrangements so as to obtain the expected and desired results therefrom.



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703 308-0525
September 23, 1998